CONCLUSIONS

1. A hundred authorized cabins are a conspicuous feature of Christmas Bay and its environs. These cabins, and their associated boat traffic, potentially impact the bay in several ways, including disturbance of colonial nesting waterbirds, damage to seagrass beds, discharge of human waste, closure of nearby oyster reefs, and accumulation of solid waste and garbage.

2. The Brazoria National Wildlife Refuge has a major positive influence on the health and functioning of the Christmas Bay ecosystem. The planned expansion of this refuge will bring the entire shoreline of Bastrop Bap into public ownership and further protect Christmas Bay.

3. Construction of the Gulf Intracoastal Waterway probably had a major impact on Christmas, Drum and Bastrop Bays by terminating the overland flow of freshwater into Christmas Bay and reducing tributary flow.

4. Changes in the peripheral emergent wetlands of Christmas Bay between 1956 and 1979 are difficult to interpret other than a 9 percent loss in total emergent vegetation acreage.

5. The seagrass beds composed of shoalgrass, widgeon grass, clover grass, and turtle grass continue to decline at a rate of 3.5 acres per year. Widgeon grass is the only species found elsewhere in the Galveston Bay ecosystem. Seagrasses are the most valuable and productive habitat of Christmas Bay.

6. There are no known water quality problems nor indications of potential water quality problems, in Christmas, Drum or Bastrop Bays.

7. Freshwater inflow is estimated to be 63,500 acre-feet per year. Point source discharges from permitted outfalls contribute 7.7 percent of the known volume.

8. As a narrow, low-lying, barrier island, Follets Island is at risk to washovers and inundation from tropical storms.

9. Christmas Bay is inhabited by a rich fauna of 96 species of fishes, 68 crustaceans, 140 mollusks, and numerous other invertebrate animals. Seven waterbird nesting colonies are found around the bay. Christmas Bay is directly inhabited by eight endangered or threatened species; 3 additional species inhabit the adjacent wildlife refuge.